WHAT IS CLAIMED IS:

1   1.   A frame structure comprising:
2   super-channel information.

1   2.   The frame structure of claim 1, wherein
2   said super-channel information comprises a super-channel identifier and said
3   super-channel identifier identifies a super-channel.

1   3.   The frame structure of claim 2, further comprising:
2   sub-channel information.

1   4.   The frame structure of claim 3, wherein said sub-channel information
2   comprises:
3   a sub-channel identifier, wherein said sub-channel identifier identifies a sub-
4   channel.

1   5.   The frame structure of claim 4, wherein said super-channel information
2   further comprises:
3   a sub-channel bitmap, wherein each bit in said sub-channel bitmap represents
4   an operational state of a corresponding sub-channel.

1   6.   The frame structure of claim 5, wherein said sub-channel bitmap
2   comprises:
3   a bit corresponding to an operational state of said sub-channel.

1   7.   The frame structure of claim 5, wherein said super-channel information
2   further comprises:
3   error condition flags, wherein said error condition flags include a
4   forced/manual switch flag.

1   8.   The frame structure of claim 7, wherein said error condition flags
2   further include a bit-error-rate flag, a loss-of-signal flag and a loss-of-frame flag.

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9.   The frame structure of claim 4, further comprising:

alternate super-channel information, wherein said super-channel information

comprises an alternate super-channel identifier and said alternate

super-channel identifier identifies an alternate super-channel.

10.   The frame structure of claim 9, wherein

said super-channel information further comprises primary enable information,

and

said alternate super-channel information further comprises alternate enable

information.

11.   The frame structure of claim 10, wherein

primary enable information is configured to indicate if said super-channel is

operational, and

alternate enable information is configured to indicate if said alternate super-

channel is operational.

12.   The frame structure of claim 10, wherein

primary enable information comprises primary LSP enable flags, and

alternate enable information comprises alternate LSP enable flags.

13.   The frame structure of claim 12, wherein

said primary LSP enable flags and said alternate LSP enable flags are

configured to indicate which of said super-channel and said alternate

super-channel should carry an LSP.

14.   The frame structure of claim 13, wherein

said primary LSP enable flags are configured to indicate if an LSP should be

carried by said super-channel, and

said alternate LSP enable flags are configured to indicate if said LSP should be

carried by said alternate super-channel.

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1   15.   The frame structure of claim 10, wherein said super-channel

2 information comprises:

3   a sub-channel bitmap, wherein each bit in said sub-channel bitmap represents

4   an operational state of a corresponding sub-channel.

1   16.   The frame structure of claim 15, wherein said sub-channel bitmap

2 comprises:

3   a bit corresponding to an operational state of said sub-channel.

1   17.   The frame structure of claim 15, wherein said super-channel

2 information further comprises:

3   error condition flags, wherein said error condition flags include a

4   forced/manual switch flag.

1   18.   The frame structure of claim 4, further comprising:

2   sub-channel state information, wherein said sub-channel state information

3   conveys a state of said sub-channel.

1   19.   The frame structure of claim 18, wherein said sub-channel state

2 information conveys a state of a connection between a far-end transmitter and a near-

3 end receiver over said sub-channel